

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 3

Complete if Known

Application Number	Not Yet Assigned
Filing Date	
First Named Inventor	Harrup et. al.
Group Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	B-214

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
SKP		US-3,817,911	06/18/1974	Taylor	
		US- 4,772,660	09/20/1988	Kitamura et al.	
		US- 4,827,005	05/02/1989	Hiltnerhaus	
		US- 6,146,787	11/14/2000	Harrup et al.	
		US- 6,217,775 B1	04/17/2001	Conca et al.	
		US- 6,254,786 B1	07/03/2001	Carpenter et al.	
		US- 6,357,968 B1	03/19/2002	Dwyer et al.	
		US- 6,398,960 B1	06/04/2002	Borden et al.	
		US- 6,403,364 B1	06/11/2002	Hince	
		US- 6,403,755 B1	06/11/2002	Stewart et al.	
		US- 6,423,531 B1	06/23/2002	Hince et al.	
		US- 6,428,695 B1	08/06/2002	Naftz et al.	
		US- 6,432,693 B1	08/13/2002	Hince	
		US- 6,524,485 B1	02/25/2003	Dubin et al.	
SKP		US- 6,544,690 B1	04/08/2003	Harrup et al.	
		US-			
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FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³ - Number ² - Kind Code ⁵ (if known)				

Examiner
Signature

Sandra K. Pank

Date
Considered

11/16/2005

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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
SKP		Wertsching, A., et al., Examination of the Physical Properties of Polyphosphazene-Silicate Nanocomposites Using Novel Synthetic Strategies, a submission to Composite Interfaces, Idaho Nat'l. Eng. and Environmental Lab.	
↑		Caruana, Alex, 1,200-Foot Permeable Reactive Barrier in Use at the Denver Federal Center, State of Colorado, Dept. of Health and Environment	
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		Messersmith, P.B., et al., Synthesis of New Materials: Organoceramics, Univ. of Illinois, Dept. of Materials Science and Eng., pp. 536-537.	
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		Sebesta, F., et al., Composite Ion Exchanger with Ammonium Molybdophosphate and its Properties, Journal of Radioanalytical and Nuclear Chem., Vol. 140, No. 1 (1990), pp. 15-21.	
		Novak, Bruce M., Hybrid Nanocomposite Materials--Between Inorganic Glasses and Organic Polymers, VCH Verlagsgesellschaft mbH, D-69469, Weinheim, 1993, pp. 422-433.	
		Wen, Jianye, et al., Organic/Inorganic Hybrid Network Materials by the Sol-Gel Approach, Chem. Mater., Vol. 8, No. 8, 1996, pp. 1667-1681.	
✓		Benner, S.G., et al., Porous Reactive Wall for Prevention of Acid Mine Drainage: Results of a Full-Scale Field Demonstration, International Containment Technology Conference, Conference Proceedings, Feb. 9-12, 1997, pp. 835-843.	
SKP		Powell, Robert M., et al., Permeable Reactive Barrier Technologies for Contaminant Remediation, EPA/600/R-98/125, Sept. 1998, pp. 1-94, U.S. Gov't. Printing Office.	

Examiner Signature	John K. Paul	Date Considered	11/16/2005
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Sheet 2	of 2		

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
SXP		Satyanarayana, J., et al., Adsorption Studies of Cesium on a New Inorganic Exchanger Ammonium Molybdophosphate—Alumina (AMP - Al ₂ O ₃), Journal of Radioanalytical and Nuclear Chem., Vol., 242, No. 1 (1990), pp. 11-16.	
↑		Field Applications of In Situ Remediation Technologies: Permeable Reactive Barriers, U.S. Environmental Protection Agency, EPA-542-R-99-002, April 1999, pp. 1-114.	
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		Ott, Nichole, Permeable Reactive Barriers for Inorganics, U.S. Environmental Protection Agency, July 2000, pp. 1-58.	
↓		Polson, Linda, et al., Synthesis, Characterization, and Ion Sequestration of Novel Nanocomposite Materials (4/02)	
SXP		Nanocomposite Permeable Reactive Barrier Research at the INEEL (2/03)	

Examiner Signature	Sandra Parker	Date Considered	11/14/2005
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